



OPM 7300 (T01) (3.0 CH)
TOPICS IN ADVANCED PRODUCTION
AND OPERATIONS MANAGEMENT
Summer 2010

INSTRUCTOR

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Office Location: 682 Drake
Office Hours: by appointment
Class Time: Tuesday & Thursday
6:15 – 9:30p

COURSE DESCRIPTION

This course examines some of the major issues of operations strategy. Representative topics include the development of operational capabilities for competitive advantage, capacity strategies, operations improvement, vertical integration and outsourcing, managing operating networks, and new process development.

COURSE OBJECTIVES

The course objective is to further develop students' knowledge of operations strategy, with emphasis on the application of operations strategy concepts to the students' work organizations or other organizations of interest.

COURSE MATERIALS

- Hayes, R., Pisano, G., Upton, D. and Wheelwright, S. 2005. Operations, Strategy, and Technology: Pursuing the Competitive Edge. New York: John Wiley & Sons, Inc.
- Package of cases (available at the U of M Bookstore)

METHODS OF INSTRUCTION

The two major methods of instruction will be analysis and discussion of case studies and in-class group exercises.

PREPARING FOR OUR FIRST SESSION

Please prepare for our initial session by studying for the mini-test, covering Chapters 1 and 2 of the text.

COURSE SCHEDULE – Preliminary; subject to adjustment

Date	Session	Topics/Events	Mini-test Coverage
May 18	01a	Introduction; Mini-Test 1	Text Chs 1 and 2
	01b	Exercise: Operations Strategy	
May 20	02a	Case: American Connector	
	02b	Exercise: Developing Capabilities	
May 25	03a	Case: Unicon Concrete Products (H.K.) Ltd.	Text Chs 3 and 4
	03b	Mini-Test 2; Exercise: Capacity Strategy	
May 27	04a	Case: Scotts Miracle-Gro	
	04b	Exercise: Your proposals	
June 01		Proposals due	
June 01	05a	Case: The Cummins Engine Company	Text Chs 5 and 7
	05b	Mini-Test 3; Exercise: Operating Networks	
June 03	06a	Case: DHL's Corporate Social Responsibility Initiatives	
	06b	Exercise: New Process Development	
June 08	07a	Case: Daewoo Shipbuilding and Heavy Machinery	Text Chs 10 and 11
	07b	Mini-Test 4; Exercise: Driving Operations Improvement	
June 10	08	to be announced	
June 15	09	to be announced	
June 17		Papers due	
June 17	10	Student Presentations	

PERFORMANCE EVALUATION

Individual Performance

Mini-Tests	10%	
Participation	25%	
Proposal	5%	
Paper	25%	
Presentation	5%	70 %

Group Performance

Mini-Tests	10%	
Group Exercises	20%	<u>30 %</u>
		100 %

Case Participation. Participation is very important. I expect you to actively participate in advancing the learning of the class. Participation means making a useful contribution in a fair number of sessions. Generally, you may choose your moments. However, on a given day, I may call on you for your contribution or I may include your name in a list of people from whom I expect to hear.

In general, a useful contribution helps push the understanding of the class forward. Examples include, but are not limited to, being involved in a discussion of assigned material, arguing your point of view during a case discussion, asking a relevant question, suggesting an alternate viewpoint, redirecting our attention to something else in need of discussion, or being actively involved in in-class activities. You do not have to be a top participant in each session, nor do you have to have the "right answer."

Although I expect you to attend every session, attendance is not the same as participation. On those very rare occasions when you are unprepared for a session and do not wish to be included in the discussion, please let me know in advance (voicemail or e-mail), but please attend. As well, please let me know if you plan to be absent. You do not have to explain; I will simply expect more from you later.

I judge participation for each session on a scale of 0 to 4, where 4 indicates an extensive contribution and 0 indicates no contribution. A regular contribution, such as building on points made by others, is worth 1. At the end of the course, I will determine overall participation by assigning grades to the best and worst participators and scaling others accordingly. **Note:** This makes it possible for everyone to do well in participation.

Mini-Tests. These are short, multiple-choice tests. Each one will cover only the assigned material from the text, but not the content of cases or other assigned readings. Each test will be administered twice, first individually and then to your group. This serves two purposes. First, it encourages you to be prepared to do your fair share in upcoming group activities. Second, it should increase your group's understanding of the assigned material.

For evaluation, I will discard the individual and group scores for the session in which you have your worst individual result. This will allow you to be unprepared, unavoidably out of town, sick, etc. for one of the mini-tests without consequences.

Proposal. This is a proposal for your paper (maximum one page) that you submit for my approval by the deadline (June 01). The purpose of the proposal is to allow you to select your own topic, while allowing me to provide some restrictions and guidance. There will be one student per similar topic (first come, first served). Hand in your proposals as early as possible. Late proposals will attract a grading penalty. Poor proposals may be returned a number of times for resubmission. **Note.** Instructions concerning style, page length, deadlines, and so forth - for both the proposal and the paper - will be handed out in class.

Paper. This is an individual paper on a topic that you have selected and I have agreed to. It must be submitted by the deadline (June 17). Of course, no paper will be late; nevertheless, a late paper will attract a penalty of minus 10% per day.

Presentation. You will present your paper to the class during our final session.

In-Class Group Exercises. For these, you will be working on an activity with your group. For a given session, your group will work on some form of "deliverable." Such deliverables might include a summary of the group's recommendation for a case situation, overheads suitable for a presentation, a chart, the results of a problem solving exercise, or a summary of the main points of your group's deliberations on a particular subject, to name a few. While designing these activities, I will assume you have mastered the appropriate content (via assigned readings, etc.) and are ready to apply your knowledge to the group activity.

A Note on Group Learning. A common objection to group work is, "I'm a good student; working with a group will lower my grade." While this may be so for one-shot group activities, such as a group term paper, it is not the case for the type of in-class group exercises we will be doing. Research in this area has shown that the group almost always outperforms its best member (about 97% of the time). So, even if you are the top individual performer in your group, your performance will likely be raised, not lowered, by the group activities.

Session Assignments (Note: listed in alphabetical order)

For each of the case/discussion sessions, you have been assigned some "Questions for Consideration." These are for guidance only, to help you focus on certain aspects of the material. For each case, you should be prepared, at a minimum, to address each question in class. However, each case discussion will normally follow a sequence of:

- Issues
- Criteria
- Discussion / Analysis
- Plan of Action

Overall, putting yourself in the position of the decision maker, the real issue is what should be done and why. That is, as the decision maker, how do you plan to resolve the situation?

Note: I have attempted to match the content of readings and cases/discussions to some degree. However, there is no implied direct match; readings may contain concepts that are not in particular cases/discussions and vice versa.

Case: American Connector Company (A)

Questions for Consideration:

1. How serious is the threat of DJC to American Connector?
2. How big are the cost differences between DJC's plant and American Connector's Sunnyvale plant? Consider both DJC's performance in Kawasaki and its potential in the United States.
3. What accounts for these differences? How much is inherent in the way each of the two companies compete? How much is due strictly to differences in the efficiency of the operations?
4. As Denise Larsen, Vice-President of Operations, what would you do regarding the DJC situation? How would you implement your decision?

Case: The Cummins Engine Company: . . . at the San Luis Potosi Plant

Questions for Consideration:

1. Which elements of the Cummins Production System (CPS) are primarily responsible for the improved performance of the San Luis Potosi plant? Would you expect the CPS to be more effective in Mexico or in the U.S. (or Canada)? Why?
2. As Joe Panella, what will you do about the proposed crankshaft machining process? What else will you do? Why?

Case: Daewoo Shipbuilding and Heavy Machinery

Questions for Consideration:

1. What were the most important steps taken in improving Daewoo's Koje operation? How did they get back from the brink?
2. As Mr. Park, how would you answer the questions you have posed (at the end of the case)?
3. Can Daewoo succeed in its objective of maintaining its market share without further capital investment?

Case: DHL's Corporate Social Responsibility Initiatives – The Disaster Management Program

Questions for Consideration:

1. What new operational capabilities in disaster management has DHL recently developed?
2. How did they develop these new process capabilities?
3. How would you recommend they apply these capabilities to future disaster situations? Why?
4. What future capabilities, if any, should they focus on developing? Why?

Case: Scotts Miracle-Gro: The Spreader Sourcing Decision

Questions for Consideration:

1. What are the strategic risks and benefits of outsourcing production of the Temecula plant to a contract manufacturer(s) in China?
2. Compare two of the options (stay in Temecula; outsource to China). Consider all relevant financial and non-financial factors that might inform your decision.
3. Develop a brief assessment of the offshoring option.
4. As Bob Bawcombe, what will you recommend and why?

Case: Unicon Concrete Products (H.K.) Ltd.

Questions for Consideration:

1. As Mr. Li, would you pursue the blanket approval for slabs and facades? Why or why not?
2. What changes do you foresee in Unicon's operation if the blanket approval is accepted by the HKHA?
3. What steps would you take to increase production of slabs and facades? How would you implement your plan?

ACADEMIC REGULATIONS

Students are encouraged to contact Disability Services at 474-6213 or the instructor should special arrangements need to be made to meet course requirements.



ACADEMIC INTEGRITY

I.H. Asper School of Business, The University of Manitoba

It is critical to the reputation of the I. H. Asper School of Business and of our degrees that everyone associated with our faculty behaves with the highest academic integrity. As the faculty that helps create business and government leaders, we have a special obligation to ensure that our ethical standards are beyond reproach. Any dishonesty in our academic transactions violates this trust. The University of Manitoba Graduate Calendar addresses the issue of academic dishonesty under the heading "Plagiarism and Cheating." Specifically, acts of academic dishonesty include, but are not limited to:

- using the exact words of a published or unpublished author without quotation marks and without referencing the source of these words
- duplicating a table, graph or diagram, in whole or in part, without referencing the source
- paraphrasing the conceptual framework, research design, interpretation, or any other ideas of another person, whether written or verbal (e.g., personal communications, ideas from a verbal presentation) without referencing the source
- copying the answers of another student in any test, examination, or take-home assignment
- providing answers to another student in any test, examination, or take-home assignment
- taking any unauthorized materials into an examination or term test (crib notes)
- impersonating another student or allowing another person to impersonate oneself for the purpose of submitting academic work or writing any test or examination
- stealing or mutilating library materials
- accessing tests prior to the time and date of the sitting
- changing name or answer(s) on a test after that test has been graded and returned
- submitting the same paper or portions thereof for more than one assignment, without discussions with the instructors involved.

Many courses in the I. H. Asper School of Business require group projects. Students should be aware that group projects are subject to the same rules regarding academic dishonesty. Because of the unique nature of group projects, all group members should exercise special care to insure that the group project does not violate the policy on Academic Integrity. Should a violation occur, group members are jointly accountable unless the violation can be attributed to a specific individual(s).

Some courses, while not requiring group projects, encourage students to work together in groups (or at least do not prohibit it) before submitting individual assignments. Students are encouraged to discuss this issue as it related to academic integrity with their instructor to avoid violating this policy.

In the I. H. Asper School of Business, all suspected cases of academic dishonesty are passed to the Dean's office in order to ensure consistency of treatment.

STUDENT IDENTIFICATION: (PLEASE PRINT CLEARLY)

_____	_____	_____	_____
Last Name	First Name	Middle Initial	U of M Student Identification Number
_____	_____		
Course #	Instructor Name		
_____	_____		
Student's Signature	Date		

TO BE COMPLETED BY THE ATTENDING PHYSICIAN: (after the above section is completed)
(PLEASE PRINT CLEARLY)

_____	_____	_____
Physician's Last Name	Physician's First Name	Middle Initial
_____	_____	_____
Street Address	City, Province	Postal Code
_____	_____	_____
Telephone Number	Fax Number	
_____	_____	
<p>To the attention of the physician: Your evaluation of the student's condition is being used for the purpose of determining whether or not the student has a <u>valid reason</u> to miss an important <u>exam</u> or <u>assignment</u>. Your professional evaluation is necessary to ensure that only valid cases are excused.</p>		
<p>I certify that the nature of the student's condition is severe enough to prevent the student from taking an exam or completing an assignment. If requested, my associates or I will verify for the above named instructor/administrator that this information is accurate.</p>		
The student's condition will likely span the following dates:		
_____	until	_____
(Indicate start date)		(Indicate end date)
_____	_____	
Physician's Signature	Date	

NOTES TO PHYSICIAN:

- Please make a note in the student/patient's file indicating that the student has given the above named instructor/administrator permission to verify with you, your staff, or your colleagues, that the information contained on this form is correct. Thank you for your professional evaluation of this student's condition.
- **PLEASE ATTACH THIS FORM TO YOUR REGULAR OFFICE STATIONERY THAT INDICATES THE STUDENT VISITED YOUR OFFICE.**

NOTES TO STUDENT:

- The use of this form is at the option of the student. However, in order to obtain an excused absence for an assignment or exam the student must obtain a doctor's certification that the student's condition is severe enough to prevent the student from taking the exam or completing the assignment.
- It is NOT SUFFICIENT to provide a note that only indicates the student visited the doctor's office.



FACULTY BIOGRAPHY

I.H. Asper School of Business. The University of Manitoba

Ron McLachlin, Ph.D. is an Associate Professor of Operations Management at the University of Manitoba, Asper School of Business. He earned his B.Sc.(Eng) and MBA degrees at the University of Alberta and his Ph.D. in Operations Management at the University of Western Ontario.

Dr. McLachlin's research interests are in operations strategy and supply chain strategy. His recent research concerns humanitarian supply chain management with an emphasis on issues of preparedness for responding to disasters. Within this, his focus is on strategies for pre-positioning relief supplies and the associated relationships within and among organizations that influence these efforts. He is also researching the transport of perishable food products between Canada and Mexico. He is the Canadian Regional Editor for Operations Management Research, on the Editorial Advisory Board for the Journal of Humanitarian Logistics and Supply Chain Management (to be launched in 2011), and was an Associate Editor (1998 to 2008) for the Journal of Operations Management.

He has published in journals such as the Journal of Operations Management and the International Journal of Manufacturing Technology and Management and has presented papers and participated in panel sessions at conferences such as those of the Production and Operations Management Society, the Administrative Sciences Association of Canada, the International Humanitarian Logistics Symposium, and the Decision Sciences Institute.

He has taught operations management, the management of quality, service operations, production seminars, operations strategy, topics in advanced production and operations management, and advanced supply chain management.